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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,423	01/07/2002	Robin L. Berg SR.	2549-010-27	4681

7590

01/16/2004

Supervisor, Patent Prosecution Services  
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Washington, DC 20036-2412

EXAMINER
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MEREK, JOSEPH C

ART UNIT	PAPER NUMBER
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3727

DATE MAILED: 01/16/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/036,423

Applicant(s)

BERG, ROBIN L.

Examiner

Joseph C. Merek

Art Unit

3727

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10/16/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 8, 31-34, 38-40, 42 and 48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 8, 31-34, 38-40, 42 and 48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 3, 5, 8, 31-34, 38-40, 42 and 48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claims 1, 14, and 31, it has not been adequately disclosed how the ribs are in the form of a "y" shape. The drawings show a "t" shape. The remaining claims are included since they stem from rejected claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 3, 5, 8, 31-34, 38-40, 42 and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claims 1, 14, and 31, it has not been adequately disclosed how the ribs are in the form of a "y" shape. The drawings show a "t" shape. It is not clear what is required to satisfy the limitation "y" shaped since the rib appears as a "t" shape. It is not clear what is being claimed. The remaining claims are included since they stem from rejected claims.


***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Traub (US 3,614,114). Regarding claim 1, as it is best understood, see Figs. 4 and 7, the rib is 65. It is a ring and the trunk 171 is on the inside of the toroid or ring. The intended use does not require any structure that is not in Traub. The structure of Traub is a rib. Regarding claims 2, 3, 5, and 8, official notice is taken that it is well known to provide seals made of fiberglass and to provide the high modulus material in the trunk. It would have been obvious to employ these features in the seal of Traub to provide a stronger or more durable seal.

A handwritten bracket on the right side of the text, spanning from the sentence 'The structure of Traub is a rib.' down to 'It would have been obvious to employ these features in the seal of Traub to provide a stronger or more durable seal.' To the right of the bracket is the handwritten number '103'.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beg et al (US 5,720,404) in view of Burwell et al (US 6,167,608). Regarding claims 1 and 31, as they are best understood, Berg et al teaches the claimed structure but the

trunk in on the outside of the toroid and not on the inside. Burwell et al, as seen in Fig. \*A, teaches that the trunk of the rib is on the inside of the toroid. It would have been obvious to make form the ribs of Berg et al on the inside of the tank as taught by Burwell et al to provide a smooth exterior tank. The rib of Berg et al '404, as seen in Fig. 7, is "y" shaped. The trunk of the rib is the top flat part that connects the two branches. The two branches extend in the form of a "Y" from the trunk. The annular material 106 is not located where the ribs are between the tank walls. See Col. 6 of Berg et al where film 106 is discussed. See the abstract of Berg et al where gutters running the length of the tank place the rib annulus in communication with the flat area or the areas where the annular material 106 is found. Regarding claim 2, see Berg et al where the ribs are made of fiberglass. Regarding claim 32, the upper surfaces of the ribs are bonded to the first wall as seen in Fig. 9, where 108 the upper end of the ribs are bonded to the first surface 102. Regarding claims 33 and 34, see Col. 9, line 1 of Berg et al where the annulus is a dry annulus and a monitor is provided to determine the presence of fluid in the annulus. The monitor has at least one sensor as known by one of ordinary skill in the art. The sensor detects the presence of fluid in the dry annulus to sound the alarm in event of a leak. Regarding claim 39, see Col. 5 lines 61-67, where the annular material is a plastic film. Regarding claim 38, the modified tank of Berg et al teaches that substitutions can be made for the annular films but does not specifically teach a fabric for the annular material. Berg et al does teach using a porous fabric for the gutters. It would have been obvious to use a porous fabric for the annular material to eliminate the need for a different material from the gutters or to as an alternative or

substitute material. Regarding claim 40, the high modulus material is the glass fibers that located in the fiber-reinforced plastic, which includes the trunk of the rib. Regarding claim 42, official notice is taken that it is well known in the art to graphite for glass fibers. It would have been obvious to employ graphite in the fiber-reinforced plastic of Berg et al to provide an alternative reinforcing material or to provide a stronger reinforcing material. Regarding claim 48, the first wall of the tank is the inner wall.

### ***Response to Arguments***

Applicant's arguments, see paper number 9, filed 10/17/03, with respect to the rejection(s) of claim(s) 1-3, 5, 8, 31-34, 38-40, 42 and 48 under Purves in view of Seiz and Berg et al '404 in view of Seiz, Berg et al '404 in view of Seiz and further in view of Humphrey and Berg et al '404 in view of Seiz, Humphrey, and further in view of Callaghan et al, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is set forth above. The examiner has included a translation of Seiz, which does not teach that the rib is toroidal. The rib of Seiz is a beam.

Applicant's arguments with respect to claims 1-3, 5, 8, 31-34, 38-40, 42, and 48 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

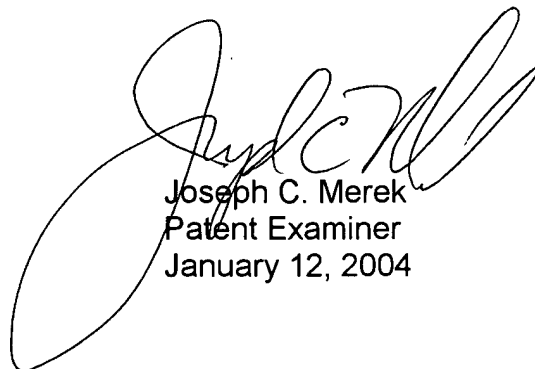
This is a non-final action due to the new grounds of rejection.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Conley, Hamlin, Rahnke et al, Kallinich et al, Flannery, Borstel, and Head et al are all cited for their structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C. Merek whose telephone number is (703) 305-0644. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee Young can be reached on (703) 308-2572. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3579.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.



Joseph C. Merek  
Patent Examiner  
January 12, 2004